



Slaughter Lane Improvement SOS Amendment 5015 1/2 W Slaughter In

C20-2022-019

Leslie Lilly

Environmental Program Coordinator

Watershed Protection





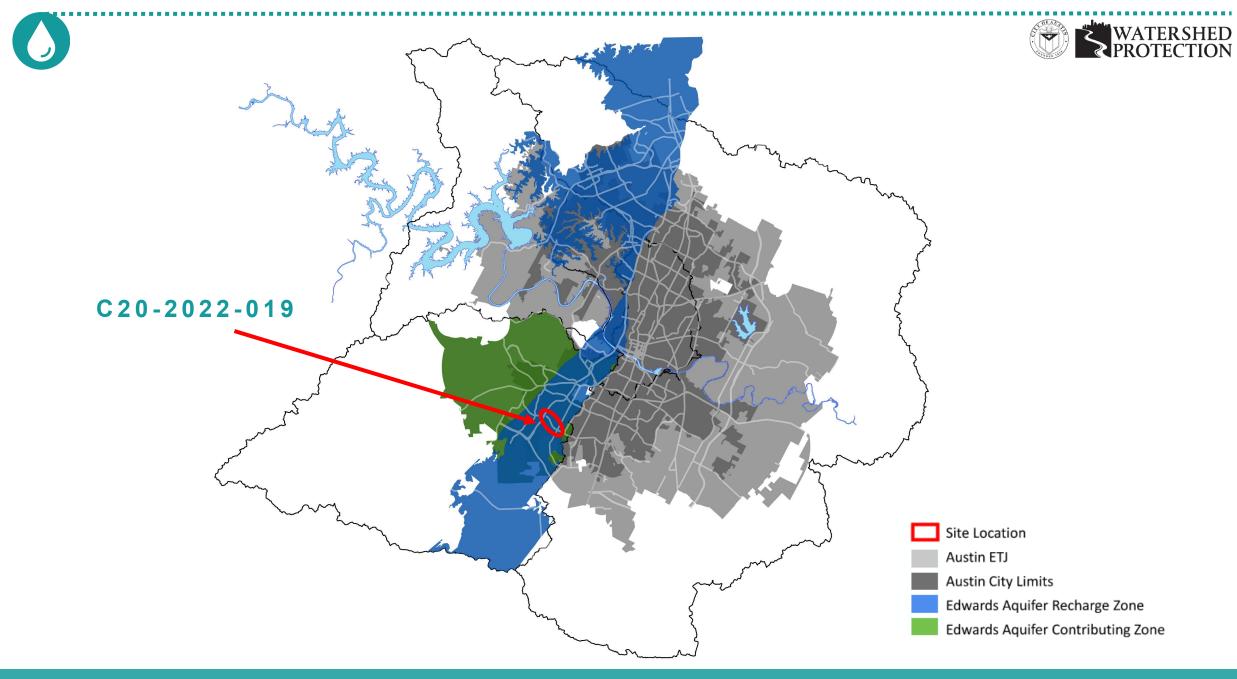
What is an SOS Amendment

- 1992 Save Our Springs ordinance adopted by citizen initiative
- Per 25-8-515, variances to SOS are not allowed
- Supermajority of Council must approve amendments to SOS
- Council Resolution 20221027-038 on October 27, 2022:
 "The City Manager is directed to initiate site specific variances



Slaughter Lane Improvement Project

- Slaughter Lane constructed in \sim 1987 (before SOS)
- One of the nine corridor projects identified for improvements in City of Austin Corridor Mobility Program
- Improvement funding provided in 2016 Mobility Bond
- Requires SOS amendment to impervious cover limits to construct improvements

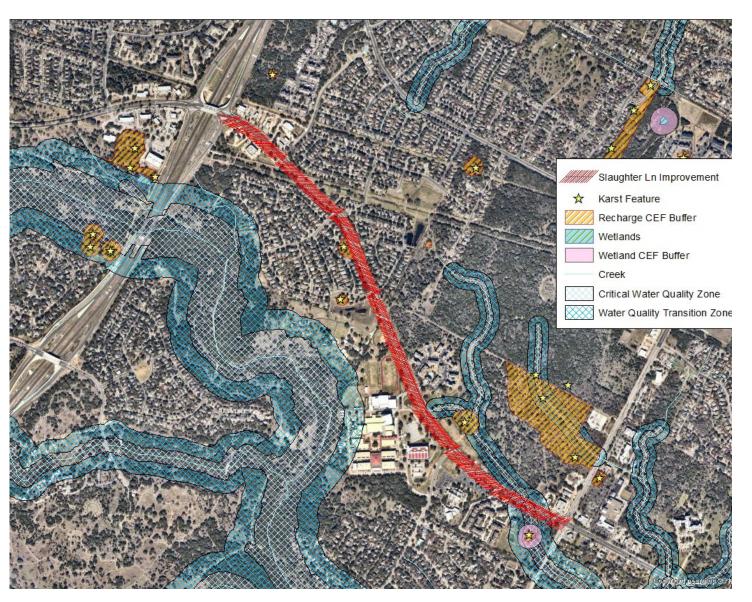






Environmental Features

- Williamson Creek and Slaughter Creek Watersheds
- Barton Springs Zone
- Edward Aquifer Recharge and Contributing Zone
- 54% Impervious Cover
- Karst and Wetland CEFs
- Non-compliant with SOS water quality requirements







SOS Amendment

• Section A of 25-8-514 (Pollution Prevention Required) shall be modified to allow a maximum impervious cover for the site of 69% net site area.

ALLOWABLE	Existing	Proposed		
Impervious Cover / Zone	Impervious Cover in ROW	Impervious Cover in ROW		
15% / Recharge Zone	54%	69%		





SOS Amendment

Slaughter Lane Water Quality improvements

Pollutant	Unit of Measure	SOS Required Annual Pollutant Removals	Project Annual Pollutant Removal (increase over existing)	Project Annual Pollutant Removal Beyond SOS Requirements	Project Annual % Removals Above SOS Requirement	
Total Suspended Solids (TSS)	lbs/yr	4,965.04	11,211.42	6,246.38	226%	
Chemical Oxygen Demand (COD)	lbs/yr	3,433	8,694	5,261	253%	
E Coli	10^6 MPN/yr	3,385,403	10,824,715	7,435,312	320%	
Total Lead (Pb)	lbs/yr	1.27	2.33	1.06	184%	
Total Nitrogen (TN)	lbs/yr	66.4	344.75	278.35	519%	
Total Phosphorus (TP)	lbs/yr	11.84	42.55	30.69	359%	
Zinc (Zn)	lbs/yr	5.67	10.33	4.66	182%	



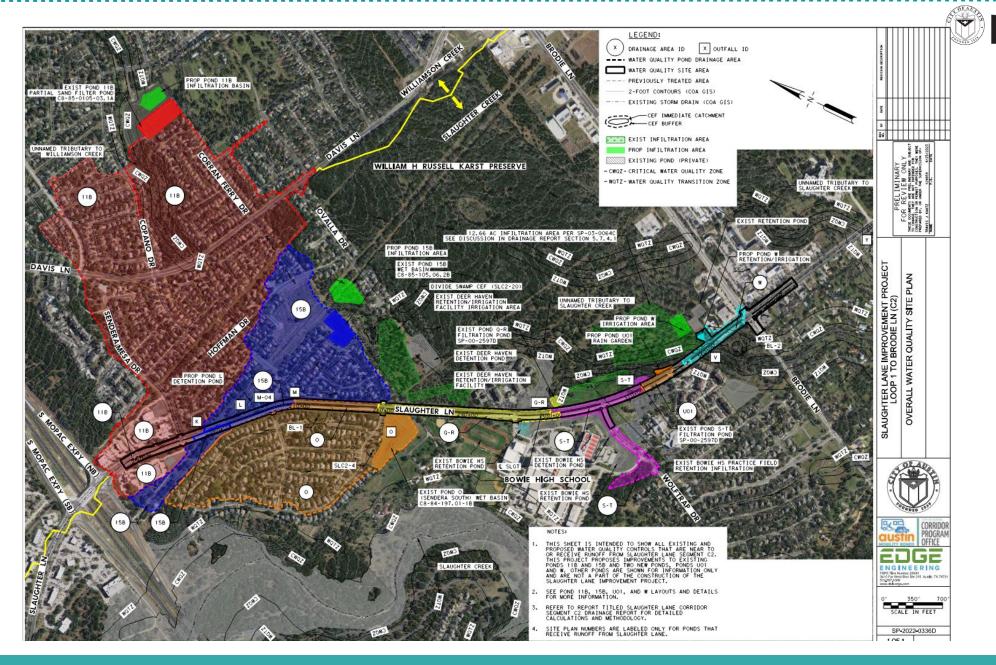


SOS Amendment

Slaughter Lane Water Quality improvements

	Chemical Oxygen Demand Ibs/yr	E Coli 10^6 MPN/yr	Total Lead Ibs/yr	Total Nitrogen Ibs/yr	Total Phosphorus Ibs/yr	Total Suspended Solids Ibs/yr	Zinc Ibs/yr
POLLUTANTS GENERATED BEFORE PROJECT	34,856	62,969,365	5.73	1,235.1	220.3	92,351	28.8
POLLUTANTS REMOVED BEFORE PROJECTS	18,905	41,014,931	1.62	562.2	132.6	70,870	10.8
EXISTING POLLUTANTS UNTREATED BEFORE PROJECT	15,952	21,954,434	4.11	672.9	87.7	21,481	18.1
PERCENT OF POLLUTANTS REMOVED BEFORE PROJECT	54%	65%	28%	46%	60%	77%	37%
POLLUNTANTS GENERATED AFTER PROJECT	36,990	65,347,844	6.39	1,281.7	228.6	95,839	31.9
POLLUNTANTS REMOVED AFTER PROJECT	27,599	51,839,646	3.95	906.9	175.2	82,081	21.1
POLLUTANTS UNTREATED AFTER PROJECT	9,391	13,508,198	2.44	374.8	53.5	13,758	10.8
PERCENT OF POLLUTANTS REMOVED AFTER PROJECT	75%	79%	62%	71%	77%	86%	66%
INCREASED PERCENT OF POLLUTANTS REMOVED AFTER PROJECT	21%	14%	34%	25%	17%	9%	29%
DECREASE IN POLLUTANTS UNTREATED AFTER PROJECT	(6,561)	(8,446,236)	(1.67)	(298.1)	(34.2)	(7,723)	(7.3)





WATERSHED PROTECTION







Variances

- 25-8-364(B)(3) (Floodplain Modification) to allow floodplain modification within a floodplain that is in good or excellent condition.
- 25-8-641 (*Removal Prohibited*) to allow the removal of a heritage tree that has at least one stem that is 30 inches or larger in diameter.

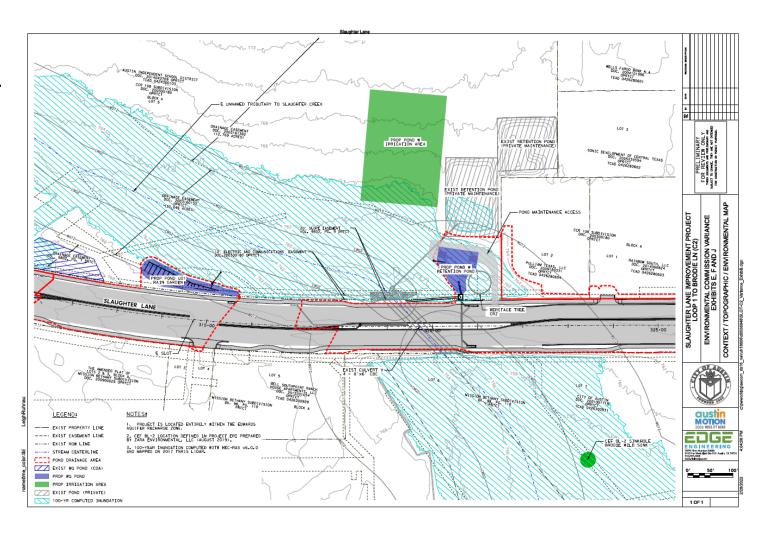




Floodplain Modification

Considerations

- Floodplain modification for water quality treatment
- Down stream CEFs
- Environmental constraints on other locations
- Limited area in ROW
- Existing development and real estate constraints
- 20+ locations examined



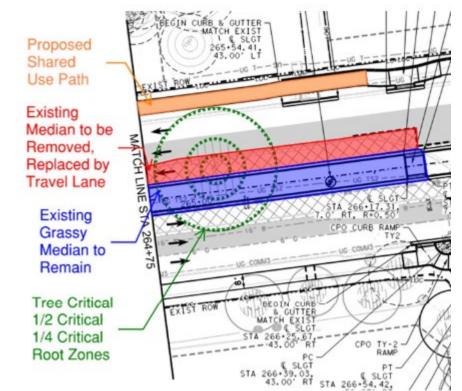




Heritage Tree Removal

Considerations

- Poor condition as determined by City Arborist
- Not a good candidate for transplanting
- Location prevents opening of traffic lanes in a public street (criteria for removal)
- Prevents development and reasonable use of the Right of Way
- Does not meet ECM tree preservation criteria
- Poses safety hazard









Staff Recommendation

Staff recommends approval of the proposed amendment and associated variances with the following conditions:

- The project is providing compliance with SOS non-degradation water quality treatment for all new and reconstructed impervious cover.
- The project is providing improved water quality treatment for all existing impervious cover.
- The project is updating 2 existing water quality ponds to provide SOS non-degradation water quality treatment for 121.6 acres of offsite drainage including 31.9 acres of offsite impervious cover.
- The project will reduce impact to 2 Critical Environmental Features recharge and wetland features within a tributary of Slaughter Creek
- The project will pay into the Riparian Zone Mitigation Fund in lieu of providing mitigation for the Floodplain Modification associated with the new water quality ponds.
- Other than the SOS amendment and variances identified, the project complies with City Code.





Questions?

Contact Information:

Leslie Lilly (WPD)

leslie.lilly@austintexas.gov